

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/034915

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/47

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EP0-Internal, EMBASE, BIOSIS, PAJ, WPI Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/085933 A (THE INSTITUTE FOR SYSTEMS BIOLOGY; ADEREM, ALAN; HAYASHI, FUMITAKA; UN) 31 October 2002 (2002-10-31) claims 1-19 page 19	1, 2, 5-13, 16, 17
X	WO 03/070761 A (YEDA RESEARCH AND DEVELOPMENT CO. LTD; COHEN, IRUN, R; LIDER, OFER; NU) 28 August 2003 (2003-08-28) page 5, line 11 - line 15 claims 1, 15, 25, 26	1, 2, 5-7, 10-13, 16, 17
A	WO 01/43691 A (PEPTOR LTD; KOLB, HUBERT; ELIAS, DANA) 21 June 2001 (2001-06-21) claims 1-7 ----- -/--	1, 2, 5-13, 16, 17

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *&* document member of the same patent family

Date of the actual completion of the international search

8 August 2005

Date of mailing of the international search report

22/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Didelon, F

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ASEA A ET AL: "Novel signal transduction pathway utilized by extracellular HSP70. Role of toll-like receptor (TLR) 2 and TLR4"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 277, no. 17, 26 April 2002 (2002-04-26), pages 15028-15034, XP002971859 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1,2, 5-13,16, 17
A	<p>VAN EDEN W ET AL: "Immunopotentiating heat shock proteins: negotiators between innate danger and control of autoimmunity"</p> <p>VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 21, no. 9-10, 14 February 2003 (2003-02-14), pages 897-901, XP004402615 ISSN: 0264-410X page 900, paragraph 6</p> <p>-----</p>	1,2, 5-13,16, 17
A	<p>VABULAS R M ET AL: "Endocytosed HSP60s use Toll-like receptor 2 (TLR2) and TLR4 to activate the Toll/interleukin-1 receptor signaling pathway in innate immune cells"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 276, no. 33, 17 August 2001 (2001-08-17), pages 31332-31339, XP002242849 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1,2, 5-13,16, 17
A	<p>VAN EDEN W ET AL: "Balancing the immune system: Th1 and Th2"</p> <p>ANNALS OF THE RHEUMATIC DISEASES, vol. 61, no. Supplement 2, November 2002 (2002-11), pages ii25-ii28, XP009051927 ISSN: 0003-4967 the whole document</p> <p>-----</p>	1,2, 5-13,16, 17

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/034915

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.: 3, 4, 14, 15
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 3, 4, 14, 15
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 3,4,14,15

The specific sequences of claims 3,4,14 and 15 have, according to PCT Rule 13ter.1.c, not been searched since the Sequence Listing as present in the description does not comply with WIPO Standard ST 25 prescribed in the administrative instructions under Rule 5.2. The Sequence Listing has been furnished neither in paper form nor in computer readable form as provided for in said instructions and the applicant has not remedied the deficiencies within the time limit fixed in the invitation pursuant to PCT Rule 13ter.1.a.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/034915

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02085933	A	31-10-2002	EP 1379552 A1	14-01-2004
			WO 02085933 A1	31-10-2002
			US 2003044429 A1	06-03-2003
			US 2005147627 A1	07-07-2005
WO 03070761	A	28-08-2003	AU 2003209623 A1	09-09-2003
			WO 03070761 A1	28-08-2003
WO 0143691	A	21-06-2001	AU 1881601 A	25-06-2001
			CA 2394504 A1	21-06-2001
			EP 1237570 A2	11-09-2002
			WO 0143691 A2	21-06-2001
			JP 2004501061 T	15-01-2004
			US 2004022777 A1	05-02-2004
			ZA 200204635 A	09-03-2004